

Additional Draft Revisions to WQS Submittal  
February 14, 2011

**Water Quality Standard 8:**

January 2011 Text:

8. Water Quality Standards and Criteria do not apply to environmental conditions brought about by natural causes or conditions.

February 2011 Revision:

8. Water Quality ~~Standards and~~ Criteria do not apply to environmental conditions brought about by natural causes or conditions.

Clarification: This portion of the WQS is intended to indicate that when natural conditions lead to an excursion of one or more parameters/conditions above that which is specified within the WQS as acceptable, there is a narrow application of Standard 8, applicable only to those parameters or conditions which are exceeded due to natural causes or conditions. WQS are still applicable to other parameters or conditions within the water body which are unaffected by natural causes or conditions.

**Appendix C Dissolved Oxygen in Marine Waters:**January 2011 Text:

Table 1. Dissolved Oxygen Chronic Cumulative Exposure Criteria for incremental ranges (0.5 mg/l and 0.3 mg/l) applicable to Class SA and SB waters.		
DO Range (mg/l)		No. of Days Allowed
<4.8	$\geq 4.5$	30
<4.5	$\geq 4.0$	14
<4.0	$\geq 3.5$	7
<3.5	$\geq 3.0$	2

February 2011 Revision:

Table 1. Dissolved Oxygen Chronic Cumulative Exposure Criteria for incremental ranges (0.5 mg/l and 0.3 mg/l) applicable to Class SA and SB waters.		
DO Range (mg/l)		No. of Days Allowed <b>Per Calendar Year</b>
<4.8	$\geq 4.5$	30
<4.5	$\geq 4.0$	14
<4.0	$\geq 3.5$	7
<3.5	$\geq 3.0$	2

**Lake Trophic Categories: Table 1**

Language from Description under Mesotrophic and Eutrophic sections pertaining to wildlife and fishing uses is proposed for deletion. See following page.

**Table 1: Parameters and Defining Ranges for Trophic State of Lakes in Connecticut**

Trophic State Based on Water Column Data	Description	Parameters	Defining Range
<b>Oligotrophic</b>	May be Class AA, Class A, or Class B water. Low in plant nutrients. Low biological productivity characterized by the absence of macrophyte beds. High potential for water contact recreation.	Total Phosphorus	0-10 ug/l spring and summer
		Total Nitrogen	0-200 ug/l spring and summer
		Chlorophyll-a	0-2 ug/l mid-summer
		Secchi Disk Transparency	6+ meters mid-summer
<b>Mesotrophic</b>	May be Class AA, Class A, or Class B water. Moderately enriched with plant nutrients. Moderate biological productivity characterized by intermittent blooms of algae and/or small areas of macrophyte beds. Good potential for water contact recreation. <del>Good resource for wildlife populations.</del>	Total Phosphorus	10-30 ug/l spring and summer
		Total Nitrogen	200-600 ug/l spring and summer
		Chlorophyll-a	2-15 ug/l mid-summer
		Secchi Disk Transparency	2-6 meters mid-summer
<b>Eutrophic</b>	May be Class AA, Class A, or Class B water. Highly enriched with plant nutrients. High biological productivity characterized by occasional blooms of algae and/or extensive areas of dense macrophyte beds. Water contact recreation opportunities may be limited. <del>Good potential for fishing opportunities and for wildlife populations.</del>	Total Phosphorus	30-50 ug/l spring and summer
		Total Nitrogen	600-1000 ug/l spring and summer
		Chlorophyll-a	15-30 ug/l mid-summer
		Secchi Disk Transparency	1-2 meters mid-summer
<b>Highly Eutrophic</b>	May be Class AA, Class A, or Class B water. Excessive enrichment with plant nutrients. High biological productivity, characterized by severe blooms of algae and/or extensive areas of dense macrophyte beds. Water contact recreation may be extremely limited.	Total Phosphorus	50+ ug/l spring and summer
		Total Nitrogen	1000+ ug/l spring and summer
		Chlorophyll-a	30+ ug/l mid-summer
		Secchi Disk Transparency	0-1 meters mid-summer

**Appendix E Antidegradation Implementation Policy:**

**V. TIER 2 ANTIDEGRADATION EVALUATION AND IMPLEMENTATION REVIEW**

January 2011 Text:

1. The Commissioner shall determine whether the new or increased discharge or activity will result in a significant lowering of water quality in a high quality water or any wetland by utilizing all relevant available data and the best professional judgment of Department staff and considering the discharge or activity both independently and in the context of other discharges and activities in the affected water body and considering any TMDL established for the water body. The Commissioner may determine that under the following circumstances a proposed new or increased discharge or activity would not reasonably be expected to significantly lower water quality in high quality waters or wetlands:

February 2011 Revision:

1. The Commissioner shall determine whether the new or increased discharge or activity will result in a significant lowering of water quality in a high quality water or any wetland by utilizing all relevant available data and the best professional judgment of Department staff and considering the discharge or activity both independently and in the context of other discharges and activities in the affected water body and considering any TMDL established for the water body. The Commissioner may determine ~~that~~ only under the following circumstances that a proposed new or increased discharge or activity would not reasonably be expected to significantly lower water quality in high quality waters or wetlands: